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18. ADDITIONS TO THE CRAB FAUNA OF BOMBAY STATE

(With two plates)

An account of the Brachyuran fauna of the Bombay coast was given in the previous issues of this journal (Chhapgar, 1957, *JBNHS* 54: 399-439; 503-549). Collections of the crabs made subsequent to the publication of this report on 'The Marine Crabs (Decapoda: Brachyura) of Bombay State' revealed the occurrence of three new distributional records. A systematic description of these three forms is given below.

Tribe BRACHYGNATHA

Subtribe OXYRHYNCHA

Family HYMENOSOMIDAE

Genus *Elamena* Milne-Edwards*Elamena sindensis* Alcock*Elamena sindensis*, Alcock, *Journ. As. Soc. Bengal* 69, p. 386 (1900).Kemp, *Rec. Ind. Mus.* 13, p. 274 (1917).Tesch, *Siboga Exped. Rep.* 39 c, p. 24 (1918).Chopra and Das, *Rec. Ind. Mus.* 32, pp. 424, 425 (1930).

Four females from Okha are in the present collection. The largest measures:

| | | |
|---------------------|----|----------|
| length of carapace | .. | 5.00 mm. |
| breadth of carapace | .. | 4.75 mm. |

This species can be distinguished by the pyriform carapace with upturned edges, and the triangular front. The tips of the dactyli of the walking legs are trianguiculate.

This species has been previously recorded from Karachi and the Persian Gulf. This is the first record from Bombay State.

Family *MAIIDAE*

Subfamily *INACHINAE*

Genus *Achaeus* Leach

Achaeus lacertosus Stimpson

(Plate I)

- Achaeus lacertosus*, Haswell, *Catalogue Austr. Crust.*, p. 3 (1882).
 Henderson, *Trans. Linn. Soc. London (Zool.)*, p. 341 (1893).
 Alcock, *Journ. As. Soc. Bengal* **69**, p. 172 (1895).
 Barnard, *Ann. S. Afr. Mus.* **38**, p. 19 (1950).
 Pillai, *Bull. Central Inst. Travancore* **2**, (1951).

Two female specimens were collected at Bombay, clinging to colonies of *Gorgonium*. The larger one measures:

| | | |
|-----------------------------|----|-----------|
| length of carapace | .. | 7.25 mm. |
| breadth of carapace | .. | 6.25 mm. |
| length of rostrum | .. | 0.60 mm. |
| length of first walking leg | .. | 21.80 mm. |

This species is distinguished by the smooth, triangular carapace with inflated branchial regions. The rostrum is short and bifid. The eyestalks are straight, and have no tubercle on their front margin. The walking legs are very long and slender, the first pair being more than three times the length of the carapace. The dactyli of the last two pairs are very strongly falcate (semicircular), and their inner margins bear recurved spines.

The specimens were heavily encrusted with algae and hydroid colonies, which necessitated cleaning in dilute sodium hypochlorite before the structure of the carapace and legs could be made out.

This species has been previously recorded from the Andamans, Palk Straits, Orissa, and Travancore, also from Australia, Persian Gulf, and South Africa. This is its first record from the Bombay coast.

Family OCYPODIDAE

Subfamily OCYPODINAE

Genus *Gelasimus* Latreille*Gelasimus inversus sindensis* Alcock

(Plate II)

Gelasimus inversus sindensis, Alcock, *Journ. As. Soc. Bengal* 69, p. 356 (1900).
Gelasimus inversus, Barnard, *Ann. S. Afr. Mus.* 38, pp. 94, 95 (1950).

Numerous specimens, of both sexes, were collected at Umarsadi. The measurements of an average sized male are:—

| | | |
|-----------------------|----|--------|
| length of carapace | .. | 10 mm. |
| breadth of carapace | .. | 16 mm. |
| breadth of front | .. | 3 mm. |
| length of larger hand | .. | 23 mm. |

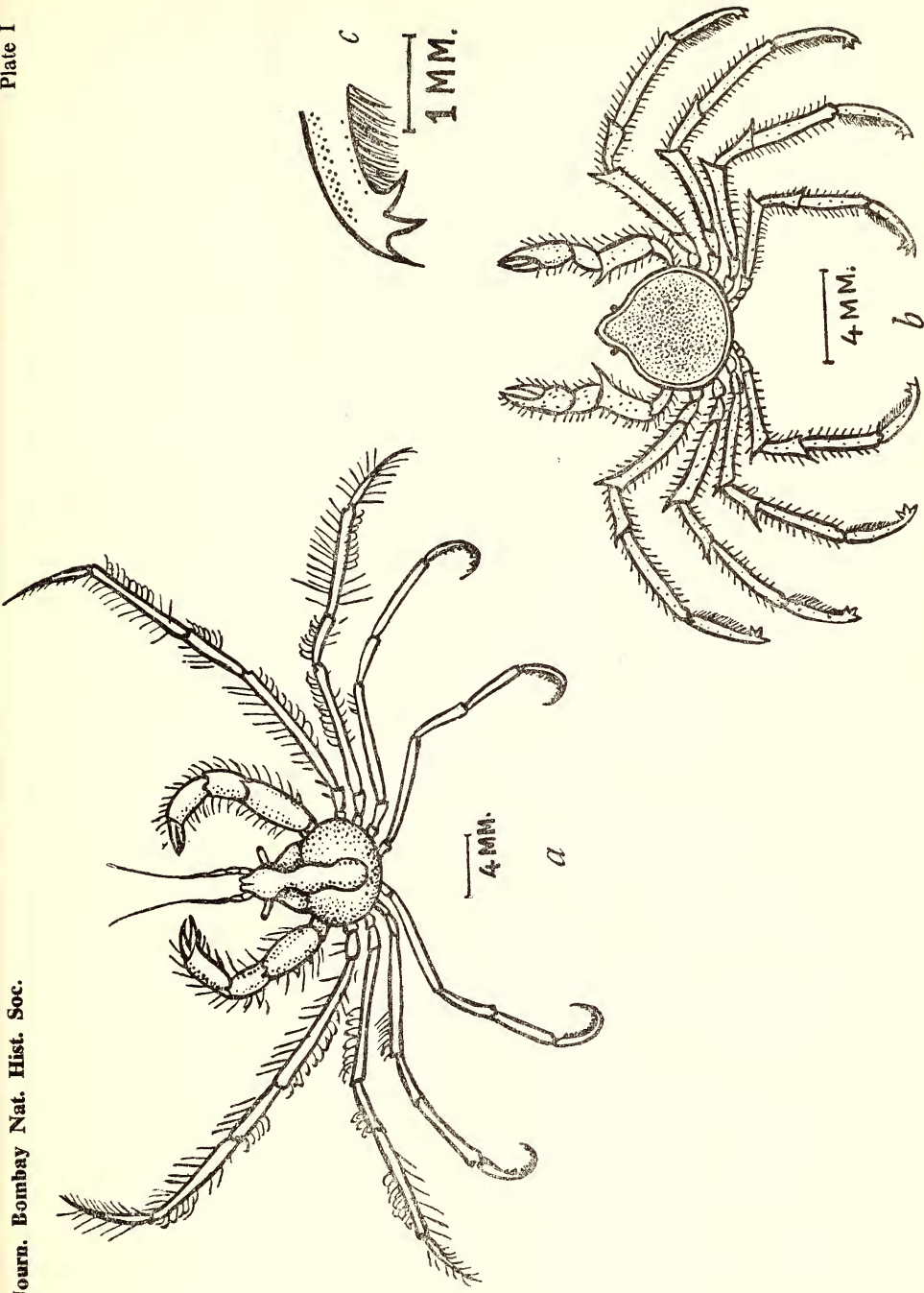
This subspecies closely resembles *Gelasimus annulipes* Latreille, but can be distinguished from the latter by the nature of the larger male cheliped. The arm of the chelipeds in *G. inversus sindensis* is trigonal with sharp edges, the upper edge rising into a distinct lobe or crest, and the distal end of the inner edge also forming a crest or blunt tooth. The upper border of the palm bears several longitudinal rows of granules. There is only one oblique granular ridge on the inner surface of the palm, running along the dentary edge of the thumb. The crest continuous with the lower border of the thumb present in *G. annulipes* is absent. The thumb is straight and has a simple tip.

Colour is similar to that of *Gelasimus annulipes*. The middle of the outer surface of the palm of the larger cheliped in the male has, however, a rosy tinge.

The anterior male abdominal appendages resemble those of *Gelasimus annulipes* in being bilobed at the tip. The larger of the two lobes which, in *G. annulipes* has a truncate-tipped bilobed appearance, has a single rounded tip with a groove. The smaller lobe on the side is situated nearer the tip of the appendage than in *G. annulipes*. The tip is more hairy.

Spooned hairs are present on the second maxillipeds. The 'spoon' consists of about eight rounded lobes on each side, continuing into hairs.

Barnard gives the distribution of *Gelasimus inversus* as Madagascar, South Africa, east coast of Africa, and the Red Sea, and Alcock has recorded the subspecies *sindensis* from Karachi. Hence this is the first record of this species from the Bombay Coast.



Achaeus lacertosus Stimpson : a. Dorsal view of crab. *Elamena sindensis* Alcock : b. Dorsal view of crab. c. Tip of walking leg, enlarged.